

Source: TSG SA WG2 (S2-041040)

Title: Updated WID on “Network sharing stage 2”

Agenda Item: 7.2.3

Work Item Description

Title **Network sharing – stage-2**

1 **3GPP Work Area**

| | |
|---|--------------|
| X | Radio Access |
| X | Core Network |
| | Services |

2 **Linked work items**

- Network sharing – Technical Report (“*Service Aspects and Requirements for Network Sharing*”) (SA1 BB, 31019)

3 **Justification**

Network sharing may be used to lower the initial rollout cost for new radio networks. In addition, network sharing provides possibilities for operators not owning a 3G license to be able to deliver 3G services.

The Technical Report 22.951 “*Service Aspects and Requirements for Network Sharing*” has been completed in SA1 and approved by SA#18. The TR evaluates the need for support for shared radio networks in 3GPP Release 6. The service level requirements and considerations presented in the TR will now have to be studied on the architecture level. It is expected that the detailed work will later be related to several other Working Groups, however SA2 is the appropriate WG to study the overall architectural aspects first.

4 **Objective**

The aim is to study the architectural impacts and develop stage-2 level solutions to fulfill stage-1 requirements and to produce CRs to relevant technical specifications [and a stage 2 technical specification for network sharing.](#) -

5 Service Aspects

Service implications for shared networks.

6 MMI-Aspects

Interactions related to network selection

7 Charging Aspects

8 Security Aspects

9 Impacts

| Affects : | UICC apps | ME | AN | CN | Others |
|-----------------------|----------------------|-----------|-----------|-----------|---------------|
| Yes | | X | X | X | |
| No | | | | | X |
| Don't know | X | | | | |

10

Expected Output and Time scale (to be updated at each plenary)

| New specifications | | | | | | |
|----------------------------------|---|---|--------------------|---|--|----------|
| Spec No. | Title | Prime resp. WG | 2ndary resp. WG(s) | Presented for information at plenary# | Approved at plenary# | Comments |
| TR 23.851** | Network Sharing: Architecture and Functional Description Architectural aspects of shared networks | SA2 | | SA#20 (June 03) | SA#23 4 (Sept 03 March 04) | |
| TS 23.xxx | Network Sharing: Architecture and Functional Description | SA2 | | SA#24 (June 04) | SA#24 (June 04) | |
| Affected existing specifications | | | | | | |
| Spec No. | CR | Subject | | Approved at plenary# | | Comments |
| TS 23.002 | | Network architecture | | SA#24 1 (June 04) (Sept 03) | | |
| TS 23.060 | | GPRS Service Description | | SA#24 1 (June 04) (Sept 03) | | |
| TS 23.221 | | Architectural requirements | | SA#24 1 (June 04) (Sept 03) | | |
| TS 23.236 | | Intra-domain connection of Radio Access Network (RAN) nodes to multiple Core Network (CN) nodes | | SA#24 1 (June 04) (Sept 03) | | |
| | | | | | | |
| | | | | | | |

11 Work item raporteurs

Ulf Nilsson (TeliaSonera)

12 Work item leadership

SA2

13 Supporting Companies

TeliaSonera, Nokia, Ericsson, T-Mobile International

14 Classification of the WI (if known)

| | |
|---|----------------------------|
| | Feature (go to 14a) |
| X | Building Block (go to 14b) |
| | Work Task (go to 14c) |

14a The WI is a Feature: List of building blocks under this feature

(list of Work Items identified as building blocks)

14b The WI is a Building Block: parent Feature

Network sharing (31018)

14c The WI is a Work Task: parent Building Block